

A NEW  
M E T H O D  
O F  
Preventing and Curing  
T H E  
M A D N E S S  
CAUSED BY THE  
Bite of a mad Dog.

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Laid before the *Royal Society*, in *February*, 1741.

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By R. JAMES, M.D.

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The SECOND EDITION.

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L O N D O N:

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TO  
*Sir Hans Sloane, Bart.*  
PRESIDENT;  
AND TO THE  
WORTHY FELLOWS  
OF THE  
*ROYAL SOCIETY.*

GENTLEMEN,



Many Attempt to improve Medicine, and to discover a certain Remedy for one of the most terrible Distempers human Nature is subject to, and which has hitherto generally proved invincible, cannot fail of being agreeable to a Society indefatigable in the Pursuit of natural  
B Know-



Knowledge, I take the Liberty of laying before you the Reasons I have to hope, that *Mercury*, in any Form, is not only an effectual Preservative against the ill Consequences of a Bite from a mad Dog, but also a Cure for them, when through Neglect the HYDROPHOBIA is suffered to come on.

In June 1732, I delivered a Memorial to Sir HANS SLOANE, containing some Experiments that had been made with *Turpeth Mineral*, upon People bit by mad Dogs; and a little before Doctor BOERHAAVE's Death, I communicated to him the same Cases, with some Additions, in a Letter, which it may not be improper to insert.

Viro Arte & Humanitate insigni, HERMANNO BOERHAAVE, *Robertus James*,  
S. P. D.

**T**IBI morbos hactenus invictos profligando, Artisquæ Medicæ Fines latius promovendo humanum Genus quotidie demerenti Rem haud ingratham factururus videor, vir clarissime, si quibus Remediis quaque curandi Methodo, Animalia quædam Aquæ metu jam laborantia, quædam mox laboratura, ad Sanitatem reducta sint, Paucis enarravero.

Anno 1732, mense Februario, apud quendam venationis studiosissimum forte otiabar. Canes  
Rabies





*Rabies invaserat, quæ usque adeo sævierat, ut ex Agmine quod numerosum aluit, triginta jam desiderarentur, demersi licet Aquis Marinis, sumptoque Stanno cum Mithridatio, cæterisque medicamentis quæ inani specificorum nomine plus nimio nosti decantata. Duos tunc Temporis rabiosos mihi ostendit, quibus duos jam vel tres Dies setæ in Dorsò arrectæ steterant; Caudæ intortæ; vox Latrantium Rauce dine quadam vitiata; multa Fauces spuma fluebant; ab esca, præsertim liquida, abhorrebant, & quicquid se objecit morsu petentes, summum morbi Gradum pati videbantur. Domino Luem tam funestam deploranti Auctor eram, ut quid valeret Turpethum Minerale experiretur. Ille vero spe quam injeceram permotus, Gr. 12 eadem vespéra utrique exhibuit: Quo Pharmaco & Alvus leniter mota & ventriculus. Vespéra insequenti Gr. 24 utrique ingestis, Ptyalismus auctus est. Tertio vero Die occidente, uterque Gr. 48 sumere coactus, Ptyalismo & vomitione & purgatione acriter pertentatus est, quibus post horas aliquot adeo debellata morbi crudelitas ut lac tepidum uterque sponte biberet. Quarta demum nocte adveniente alteri Gr. 24 dedit, alterum præteriit. Canis concepto Pharmaco Humi procubuit, Salivam uberime perfundens, dirisque cruciatibus agitat, Ptyalismum nimis temere excitatum testantibus; evasis tamen & morbi & remedii Periculis tandem valuit. Alterum Pestis nondum peni-*



tus subacta redintegratis viribus aggressa est  
extinxitque.

Canes alios duos eadem patientes idem Remedium feliciter expedivit. Cæteris canibus, ne latius serperet contagio, prima vice, Turp. Min. Gr. 7. secunda, Gr. 12. exhibuit. Eadem methodo per duos vel tres menses sub ortum novæ plenæque Lunæ usus est, ne uno quidem Cane ab eo Tempore per Rabiem erepto.

Hæc ubi percrebuerant experimenta quicquid a Cane rabioso vulneratum est, hoc malo venienti Pharmacum opposuimus, nec ex Animalibus fere bis centum quorum salus huic medicamento credita est unum fefellit eventus.

Qua via me ad hanc curationis methodum ratio deduxerit, si modo tanti est, Paucis accipe. Mihi spumam quæ Animalibus cujuscunque Generis Aquam metuentibus perpetuo nascitur consideranti, natura (seu quocunque alio nomine causam quæ quod humano nocet corpori expellere satagit appellare libet) crisin moliri visa est, vinci tamen, & quoniam sal corrosivum quod Fauces, Gulam, Oesophagum, ipsumque ventriculum inflammans, gangrænam pene tandem inducit saliva in qua innatat non satis diluatur, morbo impar succumbere; felicius forsan Bellum gessura, si, Arte suppetias ferente, Lympha copiosior provocaretur, qua venenum dispersum & tenuatum tuto facileque posset effluere. Historia quæ sequitur an hæc mea ruat Hypothesis, tu judicabis. Ego de conjecturis parum sollicitus morbum hunc gravissimum, saltem ubi  
primum



primum Gradum non exceſſerit, Mercurio, ſive ſalivam moveat, ſive non moveat, cedere, experientiâ compertum habeo.

Juvenis Annos natus plus minus octodecim, aliquot poſt menſibus quam hoc Pharmacum in Canibus expertus eram, a Cane peregrino, quem ne ſomnio quidem rabioſum putavit, in manu vulneratus eſt, aridamque in vulnere cruſtam parum incommodi ſentiens per ſex Dies gerebat. Jam vero inſolita mæſtitia invadere, jam Tremores corripere, ſomnusque quo minimo fruebatur, crebris Tendinum ſubſultibus perturbari. Hac Animi Corporiſque Ægitudine dum per tres Dies angeretur, Canes, quos in Pago plurimos eodem Tempore idem Canis momorderat, rabioſi facti, tanta malorum ſeges a quo ſemine proveniret, ſatis commonſtrârunt. Juvenis ſe in extremo Periculo verſari non ignarus, ad Pharmacopolam cui mea experimenta retuleram, confugit. Pharmacopola unum e Bol. ſeq. eadem nocte deglutiendum dedit,

R Turp. Min. Gr. xii.

Lap. Contr. ʒi.

Theriac. Androm. ʒ. S. F. Bol. No. 3.

Ea nocte paulum dormivit & ſudavit, die inſequenti duas ſedes habuit quales a Pharmacis purgantibus fieri ſolent, morbo paulatim miteſcente. Alium 2 Bolis iſdem ſe cubitum recepturus ſumpſit, unde nocte longior ſomnus, largior ſudor, Dies duæ ſedes ſolutiores, omniaque ſympto-



*symptomata leviora. Bolo tertio, cum nox ad-  
ventret, sumpto, placide dormivit, in sudores  
copiosos effusus, mane sanus vegetusque surrex-  
it; in frigidam quotidie per dies quatuordecim  
descendit, jamque & mente integra & corpore  
perfruitur.*

*In hac Historia observandum occurrit crustam,  
quam in manu sicut dictum est aridam habuit,  
post medicinam tertio sumptam escaræ instar  
decidisse, vulnusque pure probe cocto per Dies  
aliquot manasse deinde communi Digestivo sa-  
natum.*

*En Tibi experimenta quæcunque postquam vi-  
rus sævire cæperat, agere contigit; restat ut  
una atque altera Historia, quibus plures nullo  
negotio possem adjicere, commonstrem quanta vi  
hoc Remedium virus humano Generi inimicissi-  
mum sævire prohibet.*

*Puer Annos habens sedecim una & Canis a  
vulpecula rabiosa demorsi sunt. Puer Turpeth.  
Min. cum Camphora sumens Anno jam integro  
exeunte valet. Canem intra Diem decimum  
quartum Rabies interfecit.*

*Puellæ Annos quatuordecim natæ tertio abhinc  
Anno jura a Cane rabioso adeo lacerata est, ut  
Chirurgo sedula navanda esset opera ne ex sævi-  
tia simplici vulneris Gangræna nasceretur. Ca-  
nes ingenti numero ab eodem Cane hora fere ea-  
dem morsum tulerant. Ei potenti hoc Phar-  
maco vomitus ciebatur, quod postea tertia ante  
novilunium, ipsaque novilunii Die factum.  
Eadem etiam methodo a Plenilunio cautum est.*

*Prospera*



*Prospera jam nunc utitur valetudine Puella :  
Canibus ad unum omnibus Rabie mortuis.*

*Hæc scribenti novum subnascitur exemplum.  
Ingenti Cani venatico rabiosissimo Turp. Min.  
Gr. 14 summo Baculo imposita in ventriculum  
adacta sunt, re feliciter adeo cedente ut eum  
crastino Die viderim vultu placido tranquillo-  
que escis objectis sese saturantem.*

*De Historiis his experimentisque quæ summa  
Fide conscripsi, tuum, vir eruditissime, esto Ju-  
diciū, sed candidum benevolumque si quid aut  
dubium aut obscurum judicaveris, id me vel  
confirmare vel illustrare paratissimum invenies.*

*Vale.*

*To Doctor Boerhaave.*

**I** Flatter myself that you, who are continu-  
ally endeavouring to improve Medicine,  
by finding out Methods of Cure for Distem-  
pers hitherto invincible, will be pleased with  
an Account of the Means by which I have  
saved the Lives of some Animals, that had  
actually the *Hydrophobia* upon them, and of  
others, that in all probability would very soon  
have fell into it.

In *February* 1732, I happened to visit a  
Gentleman, who is very fond of Fox-hunt-  
ing: A Madness at that time raged in his  
Kennel, by which he had lost at least thirty  
Hounds, after they had been dipped in the  
Sea, and had taken the Pewter Medicine,  
with



with many others, that are too often trusted to as Specificks. He shewed me two that were actually mad. For the two or three preceding Days, their Hair stood erect, like Bristles; they carried their Tails as it were twisted; their Bark was much altered from what it was naturally; their Mouths discharged a great deal of Froth; they refused all Sorts of Aliment; especially Fluids, and bit at every thing that came near them, and in every respect shewed all the Signs of the highest Degree of Madneſs.

I advised the Gentleman to try what Effect the *Turpeth Mineral* would have upon them; upon which he gave each Hound twelve Grains of that Medicine in the Evening, which vomited and purged them gently. The next Evening he gave twenty-four Grains more to each Hound, by which the Discharge from the Mouth was much increased. The next Evening he gave each forty-eight Grains, which vomited, purged and salivated them very much; but in a few Hours each Hound was so far recovered as to lap warm Milk. Twenty-four Hours after this Dose, one of the Dogs had twenty-four Grains more given him; the other none. The Dog that took this last Dose salivated extremely, lay upon the Ground in great Agonies, and had all the Symptoms of a Ptyalism raised too quick, but got through it and recovered. The other relapsed and died.

This



This Method was afterwards tried upon two Dogs more, under the same Circumstances, with Success.

To each of the rest of the Pack, by way of Prevention, he gave seven Grains for the first Dose; twelve for the second Dose, at twenty-four Hours distance, and repeated it every Day for a little time, and again at each Full and New Moon for two or three Months, and lost not one Hound afterwards.

This Success encouraged me and my Friends to give *Turpeth Mineral* to as many Dogs, and other Animals, that had been bit by mad Dogs, as we could meet with, and it has succeeded so well, that not one Animal out of some hundreds that took it, has gone mad.

The Reasons which induced me to try the Effects of *Mercury* in this Distemper were these; when I considered the Foam, which is discharged in large Quantities from the Mouths of Animals labouring under an *Hydrophobia*, which Foam seems to be replete with the Poison, it appeared to me that Nature (or whatever that may be termed which endeavours to expell what is offensive to the animal OEconomy) was attempting a Crisis by the salivary Glands, but failed of that salutary End, because the extremely corrosive Salts inflaming the Fauces, OEsofagus and Stomach, produced a Gangrene, before it could be accomplished. It seems therefore reasonable to believe, that this Poison might pass off without doing Mischief, provided it was  
C diluted



diluted with a greater Quantity of Saliva, which *Mercury* seldom fails to throw upon the Glands of the Fauces.

I shall not be concerned, tho' you should think this Hypothesis overthrown by the following History, being very little solicitous about Conjectures, since I know by Experience, that *Mercury*, whether it salivates or not, will cure this terrible Distemper, if 'tis not too far advanced to admit of Relief.

A young Man about eighteen, some few Months after I had made these Trials upon Dogs, was bit in the Hand by a strange Dog, which he never suspected to be mad; the Wound was covered by a dry Scab, which was no great Inconvenience to him. Some few Days after, he began to be very melancholy and dejected, had Tremors frequently, and but little Sleep, and that disturbed frequently by convulsive Twitchings of the Tendons. About the sixth Day, several Dogs, that had been bit in the Village at the same time by the same Dog, ran mad, and shewed him plainly the Cause of all his Disorders. Upon this he applied to a neighbouring Apothecary, to whom I had related my Experiments, who vomited him with *Vin. Benedict.* ʒii. and then gave him as follows,

R Turpeth. Min. Gr. xii.

Lap. Contrayerv. ʒi.

Tber. Androm. ʒ. S. F. Bol. 3.

He



He took one of the three Bolusses at Night, drinking after it four Spoonfuls of a Julep. That Night he slept better, and sweat pretty much. The next Day he had two loose Stools, and found himself much better. The next Night he took another Bolus, he slept more, his Sweats were more copious; the next Day he had two Stools, and upon this all the Symptoms were much abated. The third Night he took another Bolus as before; he slept all Night very quietly, and sweated profusely; in the Morning he found himself very easy and well. He then made use of the cold Bath for some time, and perfectly recovered.

'Tis observable, that after taking these three Bolusses, the Scab on his Hand drop'd off like an Escar, the Wound ran a thick digested Matter, and easily healed.

These are all the Experiments I have had an Opportunity of making after the Poison had shewn itself by its Effects. It remains, that I give you a few Instances of the good Effects of *Mercury* as a Preservative.

A Boy about seventeen, and a Dog were bit at the same Hour by a mad Fox, which had some time before been bit by a mad Dog: The Boy for some little time took *Turpeth Mineral* and *Camphire* as an Alterative, and remains well. The Dog died mad in ten Days.

A Girl about fourteen had the Calf of her Leg so torn by the Bite of a mad Dog, that



the Surgeon with Difficulty prevented a Mortification. A great many Dogs were bit at the same time by the same Dog. She took a Vomit of *Turpeth Mineral*, which was repeated three Days before the next New Moon, and the very Day of the New Moon again. The Girl is perfectly well, and all the Dogs ran mad.

Whilst I am writing this, another Instance occurs, which confirms the Efficacy of *Mercury* in this Case. A very large Hound, that had been bit by a mad Dog, was mad and raging. Fourteen Grains of the *Turpeth*, made up with Butter, were thrust down his Throat, by means of a thin Hazel-stick. The next Day I saw him eat heartily, and he then seemed to have no Disorder.

N. B. This Case was very remarkable. I think he went mad on *Monday*. On *Tuesday* I saw him eat as above. The *Turpeth* was repeated that Day and the next. On *Thursday* he was unchained, and on *Friday* he went a hunting.

I doubt not, *Sir*, but you will judge of these Histories and Experiments with that Candour and Benevolence, which constitutes a most valuable Part of your Character. I shall at all times be ready to explain or confirm any thing relating to them, that may seem dubious, or obscure.

*I am, S I R, &c.*

R. JAMES.

AS



As these Facts are of too great Importance to be left standing entirely upon my own Credit, it may not be improper to give Copies of the following Letters, the Originals of which now lie before me; and the Gentlemen that wrote them will, at any time, be ready to attest the Truth of what they related.

*Hints, Sunday-noon, May 25, 1736.*

*Dear Sir,*

I Am sorry you had not the Account I promised you sooner, which was entirely owing to a Multitude of Company, and not out of any Disrespect. The Quantity I gave the Hound that was mad and recovered, was first 12 Grains of the *Turpeth Mineral*, resting 24 Hours. The second Dose was 24 Grains. The third Dose 48 Grains, repeated at the same Distance of Time as before.

The Dog that died, was lost, I apprehend, for want of the same Quantity that was given to that which recovered, having only the Quantity of 12 Grains for the first Dose, 24 for the second, and 24 for the third, all at the Distance of 24 Hours from each other.

The Dogs that were not actually mad, had first 7 Grains; for the second Dose 12, and a Repe-



Repetition of 12 given every other Day, and the same Quantity was given at the two or three succeeding Fulls and Changes of the Moon.

*I am, Dear S I R,*

*Your most humble Servant,*

J. FLOYER.

*Note,* The Dogs Mr. Floyer mentions were large Fox-Hounds.

N. B. The Account of the Quantities of the *Turpeth* given the Dogs that were made, as related in the *Philosophical Transactions*, and in the Letter to Dr. Boerhaave, differ from those mentioned in Mr. Floyer's Letter. I remember I took the Account from him a few Days after the Medicine had been given the Dogs; but as Mr. Floyer is positive as to the Quantities, probably I made some Mistake.

There are some other small Errors in the Letter to Dr. Boerhaave, but none, I think, very important.

*Burton, May 10th, 1735.*

*S I R,*

I Have only two Experiments to give you of the *Turpeth Mineral* on human Bodies. The first was on a Girl, about two Years ago, aged



aged about 13 or 14 Years. I gave the Dose immediately, which vomited five or six times, and gave a few gentle Stools. Afterwards, at three Days, before the next Change of the Moon, I repeated the same Medicine; and likewise gave another Dose upon the very Day of the Moon's changing. I observed the same Method with her at the next full Moon. The other was a Boy about 10 Years old last November, who had four Holes bit in the Calf of one of his Legs. I observed the same Method with him; but was obliged to dress the Wound with Digestives, laying a Cataplasm of *Mithridate* upon it. I have given the same Medicine to thirty Dogs at least, none of which ran mad, when other Dogs, bit at the same time, died. This is all I have time to write at present, being in a great Hurry.

*I am your most obedient*

*humble Servant,*

THO. TOUNDROW.

N. B. The Case of the Boy mentioned in Mr. Toundrow's last Letter, is related in the *Philosophical Transactions*, but omitted in the Letter to Dr. Boerhaave.

*Burton,*



Burton, May 21. 1735.

S I R,

I Was prevented from answering your last Letter by a Call out of Town, so gave Directions to *Will. Cotton* to inform you of the Names of the Persons upon whom the Experiments were made, and the Places of their Abode. I cannot recollect, that I ever gave the *Turpeth* to any Quadrupeds but Dogs. A Person once applied to me about a Horse, but I find the Medicine was not given. We have had lately some Dogs bit: I have heard of nine, three of which were treated after the Method mentioned in my last, all of which remain well. Three of the other Dogs ran away mad last Week. I have never yet had an Opportunity of trying the *Turpeth* upon any thing which had the Symptoms of Madness. When one of that kind offers, I shall communicate the Effect of it in that Case.

I am, S I R,

Your most obedient,

humble Servant,

THO. TOUNDROW.

S I R,



S I R,

**M**Y Master being obliged to go from Home, ordered me to give you an Account of the People to whom he hath given the *Turpeth Mineral*: One of them was *Ann Bagnell* of *Branston*; the other was a Boy of *John Cowper* of *Stephenhill* in the County of *Derby*; and they remain quite free from the least Symptoms of a *Mania*. He never gave it to any other Animals but Dogs. We have daily Instances of the good Success this Operation hath with them. There were several which were bit the other Day. Those which we gave the Medicine to, stand secure, and the rest are gone quite mad. He sent it to a Person who had two Horses bit, but they finding no Wound, did not give it them. If you please, my Master, perhaps, will give you a more intelligible Account the next Post. I beg leave to subscribe myself,

S I R,

*Your most obedient humble Servant,*

*Burton, May 19th.*  
1735.

WILL. COTTON.

D

S I R,



S I R,

**T**H E Youth that was bit was about 18 Years of Age. It was the sixth Day before he came to me. He had little Sleep from the time he was bit, was very low-spirited, attended with Tremors. I immediately gave him as follows;

℞ *Vin. Benedict.* ℥il.

℞ *Turpeth. Mineral.* Gr. xii. *Lap. Contrayerv.* ℥i.

*Ther. Androm.* ℥. *S. F. Bol.* No. 3.

℞ *Aq. Rutæ* ℥vi. *Ther.* ℥ii. *Elix. Camph.* Gut. 50.

*Syr. Pæon C.* ℥iss, *Tinct. Castor* ℥ii. M.

I afterwards cold-bathed him for five Mornings. The Bite was on the Back of his Hand; it was when he came to me a dry Scab. The fourth Day after bathing, the Wound run a thick digested Matter; which flung off the Scab, like an Escar. The Youth was a Servant to Mr. *Vernon* of *Austry*. The Cure has been much spread abroad. Two of my Business have been very busy to know what I gave him.

I am, S I R,

Your most obedient Servant,

*Tamworth,*  
*April 9. 1735.*

R. WILSON.

P. S.



*P.S.* The Vomit brought up a large Quantity of slimy Matter; also gave three loose Stools. He sweat much that Night. He took every Night afterwards one of the Bolusses, and four Spoonfuls of the Julep, which made him sweat very much. His Spirits were much better; he had two loose Stools every Day. Three Days after he had finished the Bolusses, he began to bathe, which he thought gave him fresh Life. He took, as long as the Julep held out, four Spoonfuls at Bed-time. He slept much better than usual. I ordered him to abstain from Salt-Meat, and Spirituous-Liquors; but to live on Puddings and such like Diet for a Month. He is perfectly recovered, and continues very well.

The Misfortune happened in *December*.

I have been concerned myself in a great many Cases, which abundantly confirm the good Effects of *Mercury*, both as a Preservative and a Cure; amongst which the three following seem very remarkable.

About 13 Months ago, a Neighbour's Dog came into my House, and very much worried a middle sized Spaniel Bitch, which I have now with me, making many Wounds in several Parts of her. Immediately before and after, he worried several other Dogs in the Neighbourhood. As he was a Dog of Value, his Master's Servants caught him and tied him up. The next Morning, upon a full



Conviction of his being mad, he was shot. My Spaniel had immediately all her Wounds dressed with a Mercurial Ointment, and took every Day, for a Fortnight, *Turpeth Mineral* in small Doses, by way of Alterative. After that I had her dipt, every Day, over Head in cold Water. The Bitch is now alive and well.

As some of the other Dogs were much valued, the Tin-Medicine was given them, and some other Things, commonly esteemed Specificks; but in about a Fortnight, they most of them ran mad, and the rest were destroyed to prevent farther Mischief.

The other Case is that of a young Lady about five Years old, Daughter to a Gentleman in the County of *Warwick*. This Gentleman had an *Irish* Wolf-Dog of uncommon Size, which, about two Years ago, running mad, met his Daughter in a Passage, threw her upon her Face, and stood over her, endeavouring to worry her, till the Servants came and released her. Very fortunately he had a Garland fastened to a Collar about his Neck, otherwise probably he had killed her. A Garland is a Thing well-known to the Sportsmen, consisting of two Hoops crossing each other, and which hanging before a Dog's Fore-legs, prevents his running after Sheep, or being otherwise mischievous. The Dog was immediately tied up in a Stable, and a Messenger dispatched to me. As  
I was



I was twelve Miles from the Gentleman's House, it was six or eight Hours before I could come. When I arrived, I found the Dog raging, and he was immediately after shot, for I was not then at Leisure to try Experiments upon an Animal capable of so much Mischief. I was informed that her Cap had been pulled off, her Hair very much disordered, and that the Dog had her whole Head several times in his Mouth. I directed for her *Turpeth Mineral* in small Quantities, loaded with *Camphire*, which disordered her so much, that I was obliged instead of it to give Pills made with crude *Mercury*, divided with *Turpentine*, and *Pil. Ruff.* After this she made use of the *Cold Bath* for some time, and continues perfectly well.

Had there not been a great Number of other Cases to establish the Reputation of *Mercury*, as a Preservative against the *Hydrophobia*, I should not have given this Instance alone, because we were not certain that the Lady was bit, tho' there were several Scratches on the back Part of her Head, which alarm'd us much, but 'tis possible they might be made by the Comb.

At the same time, a Boy about fourteen was brought to me, whose Arm had been much wounded and torn by a mad Dog about ten Days before. Another Boy who had been bit by the same Dog in the Head, died mad in a very few Days. This Boy's  
Wounds



Wounds look'd very livid. He took the *Turpeth* in large Quantities, his Wounds healed, and he continues well.

About three Years ago, Mr. *John Douglass*, Surgeon, in *Downing-Street*, a Gentleman well known to the learned World for some laudable Attempts to improve his Profession, sent me a Letter, and in it inclosed a printed Half-sheet, containing Instructions for the Prevention and Cure of the *Hydrophobia*. In this Paper he quotes *Desault*, an Author I, at that time, had neither seen nor heard of, which I therefore requested Mr. *Douglass* to send me, and he was so obliging as to do it some few Months after.

As the Method which *Desault* proposes, and the Cases which he gives, strongly confirm the Efficacy of *Mercury*, it will not be superfluous to transcribe a Part of what he says upon this Subject, omitting his Theory, and whatever else seems of little Importance.

“ When a Person comes to me immediately after the Bite of a mad Creature, I send him to bathe in the Sea, altho' I have no Dependence upon its Efficacy, on Account of the sad Examples we have seen of it this Year, as was said above. Nevertheless, as it is authoris'd by the Opinion of the Publick, to omit it, would be flying in the Face of a general Prejudice, and it is at least



“ least of some Advantage, as far as it calms  
 “ a little the Patient’s Mind, who measures  
 “ his Confidence by the great Number of  
 “ Medicines he uses to secure himself; and  
 “ the *Bath* abates in some Degree the great  
 “ Fear which harraffes him Day and Night.  
 “ I have observed, that their Apprehension  
 “ increases as they come nearer the fortieth  
 “ Day, like those Lawyers, who never fear  
 “ the Event of their Cause, but in Propor-  
 “ tion as they draw near the Day of Sen-  
 “ tence.

“ Secondly, Immediately after his Return I  
 “ make him take *Palmarius’s-Powder*, to  
 “ which I have added the *Corallina*, an excel-  
 “ lent *Anthelmintic*. We should be guilty o.  
 “ Ingratitude to our Predecessors in Physick, if  
 “ we neglected those Remedies which they  
 “ have transmitted to Posterity; and if the  
 “ Notions which I propose are just and true,  
 “ we are much obliged to the Ancients for  
 “ them, since they are only Consequences  
 “ drawn from their Observations, and the  
 “ Success of their Medicines; and this which  
 “ I propose, has occurred to me from the A-  
 “ nalogy of their Precepts and Doctrine.

“ I therefore order one Dram of *Palma-  
 “ rius’s Powder* in White-wine every Morn-  
 “ ing; and Women who cannot bear Wine,  
 “ take it in a Draught of warm Water.

“ In this Method I continue thirty Days  
 “ with those who have been bit in an unco-  
 “ ver’d



“ ver’d Place, or have received some confi-  
 “ derable Wound by the Bite; but to those  
 “ who have been bit in a Place that was co-  
 “ vered, and had only a few Holes made  
 “ with the Teeth, I gave the Powder only  
 “ twenty Days: It has been observed above,  
 “ for what Reason they are not in so great  
 “ Danger.

“ *Thirdly*, From the first Day of using the  
 “ Powder, I direct them to rub in one or two  
 “ Drams of the Ointment upon the Wound  
 “ and neighbouring Part, and spread the Oint-  
 “ ment all over the Part that was wounded.

“ The Remedy which I have tried with  
 “ constant Success, and by which I propose  
 “ to prevent and cure the *Hydrophobia*, is the  
 “ *Neapolitan Ointment*, made of one third Part  
 “ of *Mercury*, revived from *Cinnabar*, one  
 “ third Part of *human Fat*, and as much of  
 “ *Hog’s-Lard*.

*This is not the Neapolitan Ointment; but I suppose Default calls it so, because there is Mercury in it, as there is in the Unguentum Neapolitanum, which is described in the old Pharmacopæa of the College.*

“ This Ointment should be rubbed upon  
 “ the Wound, and round about, one or two  
 “ Drams at a time, by Intervals, or successive-  
 “ ly, as may be seen more at large from the  
 “ Obser-



“ Observations at the End of this Disserta-  
 “ tion.

“ I think I am the first who made this Tri-  
 “ al, and have no Reason to repent it, since  
 “ all those who have followed this Method  
 “ have been preserved from the *Hydrophobia*.

“ The Friction is repeated every other  
 “ Day in the Beginning, and after the third  
 “ Time every third Day, after the sixth eve-  
 “ ry fourth, till two or three Ounces of Oint-  
 “ ment have been used; the Quantity of  
 “ which ought to be proportioned to the  
 “ Strength, Age, Temperament, Sex, Bite,  
 “ &c.

“ But when the Patient comes to me seve-  
 “ ral Days after the Bite, for fear of Acci-  
 “ dent, and to prevent the *Rabies*, I order  
 “ him to make the Frictions every Day four  
 “ or five Times, and to increase the Dose of  
 “ the Powder; afterwards I leave a Day or  
 “ two between, to avoid a Salivation, which  
 “ might ensue from the daily Use of the  
 “ Ointment.

“ I have often thought, that if the *Mer-*  
 “ *cury* should occasion some slight *Ptyalism*  
 “ in this Case, it could not but produce a  
 “ good Effect; for the Poison of the *Rabies*  
 “ sticks to the *Saliva*, as above, and as *Mer-*  
 “ *cury* naturally tends towards the Mouth,  
 “ as daily Experience evinces, is it to be  
 “ doubted, that the sovereign Antidote of  
 “ so many contagious Poisons should not de-



“stroy also that of the *Hydrophobia*, which  
 “runs as it were, like a Ferret, to attack in  
 “its Retrenchment?

“*Fourthly*, I let the Patient apply all those  
 “trifling Remedies he is advised to, as  
 “Amulets about his Neck, &c. provid-  
 “ed they do not weaken or destroy the Vir-  
 “tue of my Powder and Ointment; I infi-  
 “nitely approve of Devotions and Vows  
 “and am of Opinion, that his Prayers, those  
 “of his Friends, and of devout and pious  
 “Persons, procure a happy Success to the  
 “Remedies; these Means serve at least to  
 “quiet the Patient’s Mind which stands in  
 “great need of it.

“*Fifthly*, I let him keep to his usual  
 “Meals, forbidding him all Excesses; for  
 “Experience proves that they increase all  
 “the other contagious Distempers. I let  
 “him drink Wine with Moderation, which  
 “has a Virtue of making People bold,  
 “and in this present Case it diminishes at  
 “least that terrible Fear, which torments  
 “them Night and Day. I take care that  
 “they be not left alone, and desire their Re-  
 “lations and Friends to keep them Compa-  
 “ny, forbidding them to mention Madness  
 “to them, or mad Creatures: I have even  
 “advised some to the Concert in this Town;  
 “and they have owned to me, that Musick  
 “suspended, at least as long as it lasted, their  
 “Horror and Sadness. But you may read a  
 “more



“ more circumstantial Account of the Me-  
 “ thod in the following Observations.

### First C A S E.

“ A Gentlewoman of this City going to  
 “ Meudoc, found upon the Road a little stray  
 “ Dog, which run this way and that way,  
 “ sitting afterwards down; his Tail was be-  
 “ tween his Legs, and his Tongue hung out  
 “ of his Mouth. The Dog followed the  
 “ Chariot she was in, with Part of her Fa-  
 “ mily; as soon as he saw some Shepherds  
 “ Dogs he was after them, and made them  
 “ run away, altho’ much bigger than himself.  
 “ Moreover he run into every House upon  
 “ the Road and set upon the Dogs strong or  
 “ weak, with a Superiority of Courage and  
 “ Strength, which pleased the Lady, who  
 “ thought she had been lucky in finding a  
 “ good House-dog. Her Cow-herd came  
 “ down to catch him, presenting him a Piece  
 “ of Meat he had left of his Breakfast; the  
 “ Dog refuses it, but bites him in the Hand:  
 “ He then judged him to be mad told his  
 “ Lady of it, and wanted to kill him. She,  
 “ who, among many other fine Qualificati-  
 “ ons, is of a human Disposition opposed  
 “ the Cow-herd’s Cruelty, and ordered him  
 “ to let him follow her. The Dog was hard-  
 “ ly come into the House, but he bit one of  
 “ her Children, and at that Instant herself al-



“ so in the Hand above the little Finger, and  
 “ held so fast, that notwithstanding she en-  
 “ deavoured to get loose her Hand, lifting  
 “ up the Dog from the Ground, and shaking  
 “ him with all her might, and altho’ they  
 “ struck him with great Sticks, he did not  
 “ quit his Hold, till the whole Part he had  
 “ seized was tore with his Teeth, which  
 “ made a considerable Wound in her Hand.

“ They found too late, that the Dog was  
 “ mad, and then he was killed.

“ The Lady went to the Sea, altho’ the  
 “ Weather was pretty cold; after she had  
 “ bathed she eat the Pancake, in which they  
 “ had put calcined *Oyster-shells*; but her  
 “ Mind was not easy, terrified by the fatal  
 “ and frequent Examples, which were be-  
 “ fore her Eyes in her Country: she affects  
 “ Solitude, her Sleep is interrupted by terri-  
 “ ble Dreams, and her Mind is filled with  
 “ unusual Ideas; and her Fear went so far,  
 “ as to think herself upon the Brink of Mad-  
 “ ness; she often asked for Water, to try  
 “ whether she had any Abhorrence for it.

“ I was sent for to visit her at *Meudoc*; al-  
 “ tho’ it was several Days after she had been  
 “ bit, the Wound was not cicatrised, but ap-  
 “ peared of a livid Colour.

“ I began with clearing up her Mind as  
 “ much as possible, I represented to her the In-  
 “ fallibility of my Method, the Certainty of  
 “ my



“ my Experiments, and that they never had  
 “ been followed by any bad Consequence.

“ I made her take *Palmarius's Powder*,  
 “ and rub the Wound and the Hand every  
 “ Day with half a Dram of Ointment. I  
 “ persuaded her to go abroad, to see Com-  
 “ pany at Home and elsewhere, and to go  
 “ to the Concert in this City. By this Means  
 “ she is perfectly recovered of her Fright,  
 “ secured from the Distemper, and enjoys a  
 “ good State of Health.

### Second C A S E.

“ A mad Wolf went and attacked before  
 “ Day two Dogs of one *Pey Dumenieu*, of the  
 “ Parish of *Souffans* at *Meudac*, the Farm be-  
 “ longing to *M. de Latour Demons*. He be-  
 “ gins with killing the Dog, which was able to  
 “ make the greatest Resistance; the Bitch was  
 “ afterwards most cruelly tore and almost wor-  
 “ ried to death. This Scene did not pass on with-  
 “ out a great deal of Noise on the Part of the  
 “ Dogs. *Pey Dumenieu* awakes, opens his Door  
 “ in his Shirt, and runs to help his Dogs; the  
 “ Wolf jumps upon him, and bites him in both  
 “ his Hands and Arms. His Son, called *Coufiot*,  
 “ also gets up in his Shirt, and runs to help  
 “ his Father with a Rake in his Hand; the  
 “ Wolf lets go his Hold, and falls upon the  
 “ Son, whom he bites severely in the Arm;  
 “ the



“ the Father in his Turn, altho’ wounded,  
 “ comes to succour his Son. The Wolf runs  
 “ away, he meets a Neighbour who was got  
 “ up, named *Jean Guiraud*. The Wolf also  
 “ bites him in his Arm, making three or four  
 “ considerable Holes, besides several little  
 “ ones. This last Man seized the Wolf by one  
 “ of his hind Legs, and made him quit his  
 “ Hold. The Animal continues his Tour,  
 “ and meets with a Shepherd of *Monf. Bre-*  
 “ *thonneau*, called *Criq*, whom he bites. At  
 “ last the Wolf was killed.

“ Here are four Men bit by the same  
 “ Wolf, the same Day, and the same Hour;  
 “ they all four go to the Sea, to bathe, and  
 “ come back pretty well assured of their  
 “ Cure.

“ Some Days after, *Pey Dumenieu* feels a  
 “ numb’d Pain about his Scars, which grew  
 “ hard, and rose like Imbroidery; he was ve-  
 “ ry much affrighted; they comfort him, at-  
 “ tributing it to the great Cold of the Win-  
 “ ter, 1731. However, a little while after,  
 “ he is seized with all the Symptoms of Mad-  
 “ ness as well as *Criq*; they both died mad.  
 “ Domestick Examples strike and intimi-  
 “ date commonly more than strange ones.  
 “ *Coufot Dumenieu* having seen his Father pe-  
 “ rish, expects the same Fate; the rather  
 “ since he begins to perceive Pain in his Ci-  
 “ carices, and a Swelling with Hardness.  
 “ *Jean Giraud*, his Companion, is in the same  
 “ Case.



“ Case. Monsr. *Joutard*, Merchant of *Ca-*  
 “ *stlenau*, a very honest Man, and my parti-  
 “ cular Friend, sends them to me without  
 “ Delay. I examined their Cicatrices, and  
 “ wondered that the Wolf’s Teeth could  
 “ have made such large Wounds; the Parts  
 “ were hard and swell’d, and I doubted not  
 “ but Madness was near at hand, if some  
 “ Remedy was not applied immediately, the  
 “ other two unfortunate Persons having died  
 “ one or two Days before.

“ I made them presently rub in one Dram  
 “ and half of *Mercurial Ointment*, which I  
 “ made them spread upon the Cicatrices and  
 “ about the whole Arm, which was repeated  
 “ three Days successively. I thought the  
 “ Case too pressing to allow of any Interval.  
 “ After the three first Days I made them rub  
 “ themselves every other Day, and after the  
 “ fifth Friction I left two Days Interval;  
 “ however, they took every Day a Dram  
 “ and an half of *Palmarius’s Powder*.

“ These two Patients were perfectly cured,  
 “ and returned to the Plough. I had the Plea-  
 “ sure of seeing, after the third Friction, the  
 “ Cicatrices grow flat and soft, the Pain  
 “ went off, their Courage returned, and their  
 “ Minds resumed their natural Tranquillity,  
 “ in Proportion as they perceived the Ac-  
 “ cidents disappears which had terrified  
 “ them.

“ Can



“ Can you wish for a more distinct Case  
 “ to prove the Efficacy of *Mercury* to pre-  
 “ serve Persons from Madness than that which  
 “ I have here related; four Men are bit the  
 “ same Day, the same Hour, by the same  
 “ Animal; two of them die of Madness,  
 “ the two others perceived the Symptoms,  
 “ which foreboded the others; but *Mercury*  
 “ secures them, assisted by *Palmarius's* Pow-  
 “ der. Truly, if I had but this Observation  
 “ only, it would deserve the Attention of a  
 “ Practitioner.

N. B. *Palmarius's* Remedy is as follows,  
 according to *Desault*.

*Take of the Leaves of Rue, Vervain, Tea-  
 Sage, Plantain, Polipody, common Wormwood,  
 Mint, Melissophylon, Betony, St. John's-wort,  
 lesser Centaury, each equal Parts. Let them  
 all be powdered and mixed. The Dose is about  
 a Dram.*

As I believe there is no real Virtue in this  
 Composition, and that the whole Merit of  
 the Cure is due to *Mercury*, I don't know  
 that it is worth while to mention that *Sen-  
 nertus* quotes this Remedy somewhat different  
 from *Desault*, both in regard to the Ingredi-  
 ents and Dose. As I have not *Palmarius* by  
 me, I cannot tell which is right.

I must



I must not omit the History, so far as I could inform myself, of a Medicine which I hear has been successfully used, both as a Preservative from the *Hydrophobia*, and Cure of it, and which seems very strongly to prove the great Efficacy of Mercury in this Distemper.

Mr. Cobb of Busselton, near Bristol, a Gentleman formerly in the Service of the *East-India* Company, brought from *Tonquin* two Sorts of red Powder, which are much celebrated in that Country as efficacious in this Distemper. Upon Examination, these two Powders proved native and factitious Cinnabar, and, according to the best Information I can get, Lady *Frederick* brought the same Remedy from the same Place. The Prescription is as follows:

Take of native and factitious Cinnabar each 24 Gr. Musk 16 Gr. Let them be powdered and mixed well together.\*

This Powder is to be taken all at once in a Tea Cup full of Arrack, and is said to secure the Patient for 30 Days: after which Time, the Dose is to be repeated in the same Man-

\* The Original Receipt was given me by another Hand in this Form: Take 2 Candarines of the best Musk, 5 Candarines of native Cinnabar, 5 Candarines of Vermilion. Grind them fine, and mix them in a Cup of strong Arrack or Brandy. A Candarine of *China* is the 72d Part of a *French* Crown, or Dollar, and the 80th Part of an *English* Crown, so that one Physical Ounce is rather more than 76 Candarines. This I thought proper to insert, though not exactly agreeable to Mr. Cobb's Receipt.



ner, but it should be done as soon as possible after the Bite is received.

But, if the Patient has any Symptoms of the Disease upon him, the second Dose must be repeated three Hours after the first, and this is said to be sufficient for a Cure.

Mr. *Cobb* communicated this to Mr. *Roberts* an Apothecary in *Pall-Mall*, who published the Receipt in some of the daily Papers, and I hear Sir *Benjamin Wrench* of *Norwich* has made some Experiments with it successfully, as well as many others.

Factitious Cinnabar is made of three Parts Mercury, to one of Sulphur, and, as I remember, native Cinnabar has in it near the same Proportion of Mercury, and therefore it seems that the good Effects of this Medicine ought to be principally, if not entirely, ascribed to Mercury. As to the Musk, it is an animal Substance, and consequently of an Alkaline Nature; and as Alcalies have in all Ages been recommended in this Case, it seems to be at least not prejudicial, excepting in the Largeness of the Dose when taken in this Climate, by People much less used to Perfumes than the Orientals, who probably gave Musk with the Cinnabar, in Order to make the Medicine more agreeable.

Hitherto I have only related Facts; I must now beg Leave to make a few Observations upon this Distemper.

First then, the Disease seems to be, as it were,



were, inoculated by the Bite into the Animal who receives it; for it is remarkable that the Wound whereby the Poison is received grows sore and festers some little before, or about the Time the Distemper begins to appear. Something very like this happens in the Inoculation of the Small Pox; for the Incisions where the variolous Matter had been introduced, begin to grow sore and painful about the fourth or fifth Day, that is, about the Time that the Distemper begins to shew itself? It is further remarkable, that when the Inoculation does not take Effect, the Incisions heal up in a few Days like a common Cut, and I have some Reasons to believe we may form a Judgment, with some Degree of Certainty, of the Danger a Patient is in from the Bite, by observing the Wound; for whilst that remains with a Scab upon it, I look upon him to be in great Danger; but when it once is cicatrized, I am in no great Pain for the Consequences. However I would not pretend to establish this as a certain Maxim, but should rather recommend it as worthy Observation, to Physicians who shall hereafter be concerned in such Cases.

It is a great Error, to think that every body bit by a mad Dog must necessarily go mad; I have known some Instances to the Contrary, when Nothing had been applied by Way of Prevention. I remember a young Man, that was bit three Times by Dogs which were certainly mad, at the Distance of some Years



betwixt each Bite ; and though he could never be prevailed upon to take any Precautions, he never went mad. But in him the Wounds cicatrized as if they had been made by a Dog that was not mad. But these Instances are so rare, that they are not to be depended on.

The Symptoms of Madness in Men are too well known to want a Description : But from what I have been able to learn, I am persuaded that the Barking like a Dog, commonly mentioned as a Sympton attending the *Hydrophobia*, is, at least generally, imaginary ; that Circumstance being only in a greater Degree what happens in an ordinary Quinsy, when the Parts above the Larynx are inflamed, which necessarily must alter the Tone of the Voice considerably ; and it is remarkable that the first sure Sign of a Dog's being actually mad, is an Alteration in his Bark.

But I must mention another certain Sign of approaching Madness in Dogs, because I don't find that 'tis generally known : It is that all other Dogs will by a natural Instinct run away from, and avoid a Dog that is going mad, with Signs of great Terror and Consternation. And of this I have seen frequent Instances.

The Difficulty of giving the mad Dog a Dose of Turpeth Mineral, I find, has been objected by some as an insuperable Obstacle to the Method of Cure I recommend ; but there is nothing more easy. Two Pair of Douples,  
or



or one Collar with two Pair of Chains to it, will readily fix a Dog's Head in such a Position, as to make it impossible for him to turn and bite; then compressing the Skin of his Neck, with one Hand, to make him open his Mouth, a Ball fixed to the End of a thin Hazle Stick, or Whale-bone, is thrust down his Throat without any Difficulty.

That Distemper which in Dogs and other Animals is called Madness, I look upon to be Nothing more than a Fever, to which Carnivorous Brutes are peculiarly subject, and of which the *Hydrophobia* is a Symptom. Now when this Distemper is inoculated into any other Animals, it does not appear to me wonderful that the same Symptoms should appear in the Animals it is inoculated into, as in the Animal it was inoculated from.

I have known several Farmers in the Country almost ruined by a Distemper amongst their Horses, which they call, I am afraid sometimes improperly, the Staggers, and which seldom seizes one Horse, without infecting many others in the same Stable. By comparing the Symptoms of this Disease, with the Account *Vegetius* gives of the *Hydrophobia* in Cattle, I am inclined to believe that many Horses, said to have the Staggers, have in Reality been bit by a mad Dog: The Symptoms, according to *Vegetius*, are a great Distension of all the Veins, Inflammation of the Eyes, Sweats, Tremors, Grinding of the Teeth, Beating



Beating themselves against the Wall, and soon after direct Madness. And these are exactly the same with those I have known attend the Staggers.

I mention this, because I would advise every Body, that has a Horse seized in this Manner, to keep him separate from all others, and to give all that have been near him some Doses of Turpeth Mineral, in Quantities proportional to the Size of the Horse, and afterwards to make them swim every Day in cold Water.

That I may omit Nothing which may contribute to set the Efficacy of Mercury against this Sort of Madness in its true Light, I must confess I heard it was made Use of once, last Year, without any Success; but then it was used in such a Manner, that none could be expected from it. Soon after this happened I waited on Mr. *Floyer*, the Gentleman who first tried the Experiment upon his own Hounds, and desired the Favour of him to enquire particularly into the Management of those Hounds, that had taken the Medicine without Success; and was informed by him, that a great Number of Hounds had ran mad, in the Gentleman's Kennel, and had probably bit every Dog in it; that the Servants being afraid to come near the Dogs, to give them the Medicine properly, threw a great Number of Balls made with Turpeth Mineral and Butter into the Kennel; by which Means some got more than their Share, and others none;



so that those which got none went mad, and bit the others again. He added, that he had not the worse Opinion of the Medicine for this Trial, having never known it to fail in a Multitude of Experiments which he himself had made with it.

It remains that I now give the precise Method, which I would make Use of, if I should be called to a Person bitten by a mad Dog.

First, I would rub into the Place wounded, as soon as possible, a Dram of the Ointment recommended by *Desault*. I would then give Turpeth Mineral, by Way of Vomit, in a Dose proportioned to the Age and Constitution of the Patient; and this I would repeat more than once at Intervals, which would secure it from raising a Salivation, always remembering to rub the Wound once in a Day, or oftner, with the Mercurial Ointment. In the mean Time I would not omit the *Pulvis Antilyssus*, consisting of Ash-coloured Liverwort and Pepper, recommended by Dr. *Mead*; whose great Humanity and Benevolence to Mankind, would not suffer him to give any Medicine a Character, that he had not the strongest Reasons to think it deserved. Nor should I omit to direct Cinnabar and Musk, in the Manner mentioned above.

The Method advised by Dr. *Mead* is this: Bleed the Patient to 9 or 10 Ounces. Take of the *Lichen Cinereus terrestris*, ℥iv. Black-Pepper powder'd, ℥ij. Divide these when mixed  
into



into four equal Parts, and let one of them be taken every Morning.

Then let the Patient go into cold Water every Morning, for a Month. But when through Neglect any Symptoms of approaching Madness should appear, I would increase the Quantity of Mercurial Ointment, and give Mercury in some Form or other internally, in as large Doses, and those as often repeated, as could be done, without hazarding the Patient by a Salivation too precipitate. In both Cases I would recommend the Cold Bath, as a Thing of great Consequence, as soon as ever the Patient can make use of it without Danger. But in this Case, as in all others, many accidental Circumstances will occur, for which it is impossible to lay down universal Rules: It must therefore be left to the Prudence of a Physician to guard against, and remedy Inconveniences arising from particular Accidents.

Dartmouth-Street.

Dec. 4, 1740.



Wilson R.

Fi

12. 24. 40.

F I N I S.

24 hours dist.

heap. Ointment

Palm. post. Fol. 32